Scenario B1 (2030s without I·PARK2)

The background seawater intakes and outfall discharges considered under Scenario B1 (2030s without I·PARK2) are shown in the figure below and described in **Table B1**.

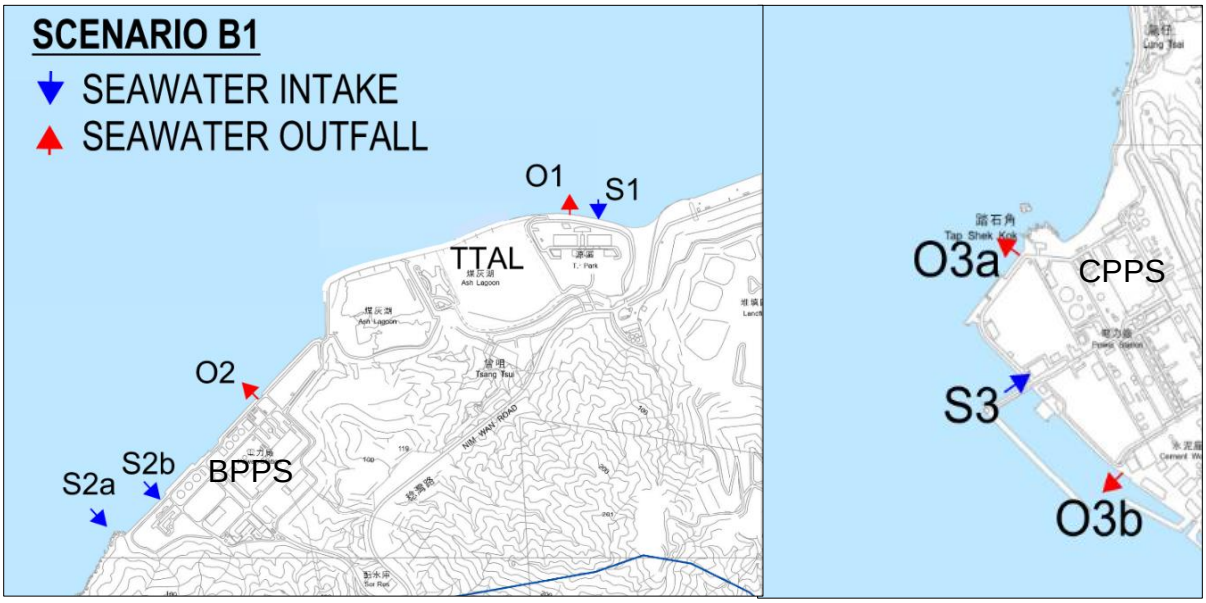

Table B1 Intakes and Outfalls Considered in Scenario B1

ID	Site	Activity	Operating hours per day	Parameters Considered in Modelling
S1	T·Park	Seawater intake for desalination plant	24	Intake flow
O1		Effluent outfall of desalination plant	24	Effluent flow, salinity, temperature and TRC
S2a	BBPS	Seawater intake for original cooling water system	24	Intake flow
S2b	BBPS	Seawater intake for Additional Combined Cycle Gas Turbine (CCGT)	24	Intake flow
		Seawater intake for cooling water blowdown	24	Intake flow
O2	BBPS	Effluent outfall of original cooling water system	24	Effluent flow, temperature and TRC
		Effluent outfall of Additional CCGT	24	Effluent flow, temperature and TRC
		Outfall of cooling water blowdown effluent	24	Effluent flow, temperature and TRC
S3	CPPS	Seawater Intake for cooling water and compressor cooling	24	Intake flow
O3a	CPPS	Outfall of cooling water effluent	24	Effluent flow, temperature and TRC
O3b	CPPS	Outfall of cooling water effluent	24	Effluent flow, temperature and TRC
		Outfall of compressor cooling effluent	24	Effluent flow, temperature and TRC

The flow and load of these background intakes and outfalls adopted in the modelling are based on actual monitoring data obtained from the intake operators. For any site or specific parameter where no monitoring data are available, the design values provided by the operators or the discharge limits in the WPCO discharge licenses are adopted.

Scenario B2, Scenario B3 and Scenario B4 (2030s with I·PARK2)

The background seawater intakes and outfall discharges as described in **Table B1** above are also considered under Scenario B2, Scenario B3 and Scenario B4 (2030s with I·PARK2). Scenario B2, Scenario B3 and Scenario B4 also incorporates the intake and effluent of I·PARK2 as tabulated in **Table B2** and their locations are shown in **Exhibit 5.3**.

Table B2 Modelling Assumptions for Intake and Outfall of I·PARK2

ID	Activity		Period	Design Flow (m^3/day), see Notes below	Operating hours per day	Design Salinity Level (ppt)	Design Temperature Elevation (°C)	Design TRC Limit (mg/L)	SMBS Limit (mg/L)
Modelling Scenario B2 for Option A – Air-cooled System (see Note 3)									
I·PARK2-Seawater Intake	Seawater Intake of Desalination		Annual	−4,000	24	-	-	-	-
I·PARK2 - Outfall Option 1	Effluent Outfall of Desalination		Annual	+2,400	24	60	-	0.2	0.5
Modelling for Scenarios B3 and B4 for Option B – Once-through Seawater Cooling System (see Note 3)									
I·PARK2-Seawater Intake	Seawater Intake	Desalination	Annual	−4,000	24	-	-	-	-
		Seawater cooling	Dry Season (November to April)	-1.12M	24	-	-	-	-
			Wet Season (May to October)	-1.15M	24	-	-	-	-
I·PARK2 - Outfall Option 2 (Scenario B3) or Outfall Option 3 (Scenario B4)	Effluent Outfall	Desalination	Annual	+2,400	24	60	-	0.2	0.5
		Seawater cooling	Dry Season (November to April)	+1.12M	24	-	+ 10	0.2	0.5
			Wet Season (May to October)	+1.15M	24	-	+ 10	0.2	0.5

Notes:
1. -ve sign in the table denote intake of seawater.
2. +ve sign in the table denote outflow of Project discharge.
3. With reference to **Exhibit 5-3**, Outfall Options 1, 2 and 3 are assumed under Scenarios B2. B3 and B4 respectively.